



National Renewable Energy Laboratory

October 9, 2003

Offerors:

Subject: Amendment No. 1 to Request for Proposal No. RAM-3-33200 for "Low Wind Speed Turbine Project – Phase II"

The following lists questions submitted and answers provided to those questions to date:

1. Question: we are unsure how we can compute a projected COE, based purely on the cost of ownership of a component, which is one subsystem, since the COE is based on many factors beyond the cost and durability of the just the component. Is it sufficient for our proposal to demonstrate a lower cost of ownership of this particular subsystem in order to meet your evaluation criteria?

Answer: Projection of an aggregate COE is crucial for your proposal in response to RFP RAM-3-33200, since this element comprises 20 percent of your aggregate proposal score. The importance of COE in this solicitation derives directly from the Low Wind Speed Technologies Project, which is pursuing specific, quantitative COE targets as program performance goals. Because of the complexity and importance of the COE projection, a standard algorithm has been developed to facilitate computation of this quantity. The COE projection algorithm, as well as key inputs and assumptions, are documented in Attachments C and D to the Low Wind Speed Technologies Project Statement of Work, which is available at <http://www.nrel.gov/contracts/solicitations.html>.

An approach for calculating the impact of a new component on the overall COE requires some basic knowledge of total turbine costs subdivided into major elements. These data could be obtained from a manufacturer who may want to integrate a proposed improved component into their design. If such data are not available, supporting data for machines of several sizes may be extracted from documents produced under the WindPACT Project, which can be found at <http://www.nrel.gov/publications/>, by searching for documents containing "WindPACT" in the title.

2. Question: I am familiar with the NWTC test site, and it doesn't seem like the ideal class 4 site. However, as it is an NREL sponsored program and many of you are located there, can you provide any guidance with respect to our test planning and the use of your site such as costs and logistics issues for a 1.5 MW turbine with a hub height of 80-85 meters?

Answer: NWTC testing facilities and services could potentially be made available to



LWST subcontractors, provided that subcontractor requirements are compatible with NWTC testing capabilities and schedules. In general, this compatibility is determined by several complex factors that cannot be confirmed reliably prior to proposal submission. Thus, to avoid making unwarranted assumptions that could dilute their proposal, offerors should avoid structuring their proposal based on any assumption that NWTC testing support will be available to them.

3. Question: What costs are applicable to the cost share requirement ?

Answer: All costs. To be allowable, cost sharing must be expended during the subcontract performance period, and in direct support of the subcontract effort. In addition, 20% of the required 30% minimum direct cost sharing must come from private sources, where “private sources” refers to sources other than federal, state, or municipal governments.

4. Question: Is there a preferred method of scheduling payment.

Answer: No.

5. Is a business plan expected for Technical Area 2?

Answer: A formal business plan is not required. However, to enable assessment of commercial potential, the proposal should provide evidence that the component to be developed is compatible with or can be integrated with current or planned wind energy systems.

6. Question: Can NREL provide testing services for a prototype subsystem?

Answer: See answer 2.

7. Question: Is the intent of Technical Area 3, LWST Prototype Development, relative to Technical Area 2, Component Development, based on technical maturity or level of integration?

Answer: Technical Area 2 encompasses components or subsystems which, alone, do not comprise a complete wind energy machine, while Technical Area 3 aims for complete wind energy machines. In both cases, the development strategy should be structured to maximize commercial impact and minimize time to market.

8. Question: Would a Conceptual Design Study (Technical Area 1) proposal be considered responsive to the program objectives and likely be eligible for funding within the program's guidelines if the subject matter of the proposal dealt primarily with a field measurement R&D campaign to better characterize wave and wind conditions in an



offshore environment using innovative environmental monitoring techniques? The goal of this effort would be to provide better offshore environmental data for targeted development areas for the purposes of designing optimized offshore wind turbine technologies (including foundations). The primary customer for these data would be manufacturers of offshore wind turbines and foundations.

Answer: Offshore technical issues are broadly defined, and diverse opportunities have yet to be exploited. Conceptual design studies that propose to develop data bases or methodologies for quantifying loading specific to the offshore environment would be considered responsive to the LWST RFP

9. Question: The plant size is for a large 100MW wind farm. Can a small business have a reasonable chance to bid for such a large project if the technical area is for a Conceptual Design Study.

Answer: The 100 MW plant size stated in the cost of energy analysis is not intended to be a requirement for development. Rather, it is a hypothetical capacity selected to enable other model parameters to be fixed and a standardized cost of energy analysis algorithm to be established. This standardized analysis, or variants thereof, are routinely employed in the wind energy industry. Offerors are required to adhere to this standardized analysis, to enable consistent evaluation of proposals.

The due date for submittal of proposals remains unchanged (11/17/03).

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